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APPLICATION NUMBER: 60/565,872

FILING DATE: *April 28, 2004*

RELATED PCT APPLICATION NUMBER: *PCT/US04/40503*

Certified by



Jon W Dudas

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## PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

22154 U.S. PTO  
60/565872

INVENTOR(S)					
Given Name (first and middle [if any])		Family Name or Surname		Residence (City and either State or Foreign Country)	
David		Dise		Richmond, Va.	
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
WRIST/ELBOW/FOREARM....SINGLE BAR/HANDLE TRAINER					
Direct all correspondence to: <span style="float: right;"><b>CORRESPONDENCE ADDRESS</b></span>					
<input checked="" type="checkbox"/> Customer Number <span style="border: 1px solid black; padding: 0 20px;">30743</span>		<div style="border: 1px solid black; padding: 5px; display: inline-block;">Place Customer Number Bar Code Label here</div>			
OR <span style="float: right;">Type Customer Number here</span>					
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ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages <span style="border: 1px solid black; padding: 0 10px;">3</span>		<input type="checkbox"/> CD(s), Number <span style="border: 1px solid black; padding: 0 20px;"></span>			
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets <span style="border: 1px solid black; padding: 0 10px;">3</span>		<input type="checkbox"/> Other (specify) <span style="border: 1px solid black; padding: 0 20px;"></span>			
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76					
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)					
<input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27.		FILING FEE AMOUNT (\$) <span style="border: 1px solid black; padding: 0 20px;">\$80.00</span>			
<input checked="" type="checkbox"/> A check or money order is enclosed to cover the filing fees					
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<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.					
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____					

Respectfully submitted,

SIGNATURE

TYPED or PRINTED NAME Michael E. Whitham

TELEPHONE

703-787-9400

Date

4-28-04

REGISTRATION NO.

32,635

(if appropriate)

Docket Number:

07880013PR

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P19SMALL/REV05

## Wrist / Elbow / Forearm....Single bar/ handle trainer

I have been using this piece for 4 to 6 months through our launching of the Butch Harmon Golf Fitness program and the development of our tennis, baseball and hockey programs. I have been training athletes for over 20 years and owned multiple locations for the last 16 years. I have never seen this piece used anywhere and I have tried to purchase one many times, because it is very expensive to have these types of things made on a one off basis.

This handle is used for 4 of the 6 hand / wrist / elbow / forearm movements that must be performed to completely train the function of a good grip and wrist snap in any activity. It also is critical to preventing tendonitis (tennis elbow), or rehabbing the injury. The poster I have enclosed, that we post with our programs, show the 6 drills, as they must be trained, in order to build strength and flexibility through a full range of motion. Drills number 3-4-5 and 6....called Radial Flexion, Ulna Flexion, Supination and Pronation respectively. The unit must be able to be attached at least at one end and for best results, it should have a large disc or guide below the attachment ring (point) as pictured in Figure (1). The bar can also just be straight and have a rubber grip for traction, or a non-slip surface, as in picture Figure (2).

The disc or rub protection (guide), keeps the resistance cord off of the users hand almost completely, which avoids any undo friction against the arm / hand and wrist. As in drills 3-4-5 and 6, when the bar is lifted up, down, or turned over either way, the cable or other form of resistance attaching cord, can rub very hard against the body and it can be irritating and also hinder the efficacy of the exercise. The handle should be quite a bit longer than a normal weight lifting handle (usually 8 inches or more, but can be a little smaller if needed. This allows for several benefits. #1. The different hand positions change the leverage and the higher up the handle the user grabs, the easier the movement or the greater the leverage, see figure (3).. #2. The long handle allows the user to use two-handed wrist / hand exercises, by snapping both hands as in a golf or baseball swing, see figure (4).. #3. The long handle allows for both hands to be positioned as in the particular sport or activity and pulling, swinging, turning the hands over while both holding at the same time, type of movements can be duplicated in a sport or activity specific fashion. Using weight or other resistance, allows the user to strengthen a desired hand, wrist / forearm motion required for performance. The rub guard (disc), also keeps the cord off of both hands in certain movements, so not only is this a single handed attachment used for the pictured lifts or movements, but a two fisted training handle for desired activity specific improved or rehabbed function, see figure (5).

I have checked every weight attachment company, weight bar company, sport equipment company and physical therapy equipment manufacturer all over the world and nobody produces this piece or has ever seen it produced. Also, the professional baseball, tennis, golfers, hockey players, that I have trained and are currently training have never seen or used one of these units until I showed it to them. They all agree, it is 4 of the critical movements, but they have no way to train them through a full range of motion, providing resistance throughout the entire range of motion. I showed it at the 2004 International

PGA trade show and the largest training aid company in the world, Dr. Gary Wiren's "Golf Around the World", had never seen anything like it. People that try and perform those 4 critical movements either use a weighted pole or use a regular weight machine handle and grab the strap or have the strap come directly over the hand, either way is inferior, not providing full range of desired resistance or flexibility, see figure (6) for the incorrect grip using standard handle.

This handle can be attached to many types of resistance, either in a fixed position or even a rubber tube that can be fixed low and higher see figure (7). The posters that have Butch Harmon Golf Fitness on the top have a FreeMotion machine where the pulley positions can be adjusted, providing the desired angle of resistance based on size and build.

This handle or training attachment has applications in all sports, especially the sports where a club, racquet, stick or bat is used. There is also a great application in fitness for those who desire to be as functionally fit as possible. The rehab industry can use this unit for preventing tendonitis (Tennis Elbow) and for rehabbing almost all elbow, wrist injuries or age prevention and youthful strength and range of motion regained. Regardless if it is used for athletic enhancement, injury prevention, physical efficiency or rehabbing an injury, all 6 movements on the poster must be performed to have optimal functional efficiency and without my invention, only the wrist flexion and extension are capable of being trained using resistance through the full range of motion. My handle must be attached if that same full range of motion requiring resistance is to be done correctly for the last 4 drills on the poster Radial and Ulna Flexion and Pronation and Supination.

I have filed a patent application for the combination of both a traditional and a handle like this one, but I want to file for this particular bar / attachment, so that I can continue to use it without everyone trying to steal my idea and drills. The programs we currently have and operate require two handles for the complete wrist / forearm / elbow and hand workout and that is how we will continue to do it for now. We plan on packaging the two handles with rubber tubing and other items for a travel system or so a person can throw them in their gym bag and use them on commercial strength training gear. (as pictured in the 6 drills on the Harmon Poster.

Finally, the rub disc can also be shaped in other designs as to keep the cord off of the user, such as the curved guide in Figure (8). The types of rub preventing shapes / designs, will be determined by the type of resistance used or activity or movement that the user may be imitating or duplicating. The more drastic the attachment point is flipped over, or moved end over end, the more of the chance for cord or cable rubbing. This item is not available other than the units that I have made for our programs, with or without a rub guard. This is the reason that I seek patent protection, both in the U.S. and internationally. My sport specific programs that use the bar, are sponsored by the largest exercise company in the world (ICON) and the bar / handle is used in my programs mainly on their FreeMotion line, but we plan on retailing under several brand names. Several companies have asked me if I would make them or allow them to use the idea, but I said it is being applied for protection and when the adequate papers are filed, I will consider it. I work very closely with these companies, so they will not use it unless I agreed and they

are well aware that I came up with the idea and design for the desired function and for the utilization..

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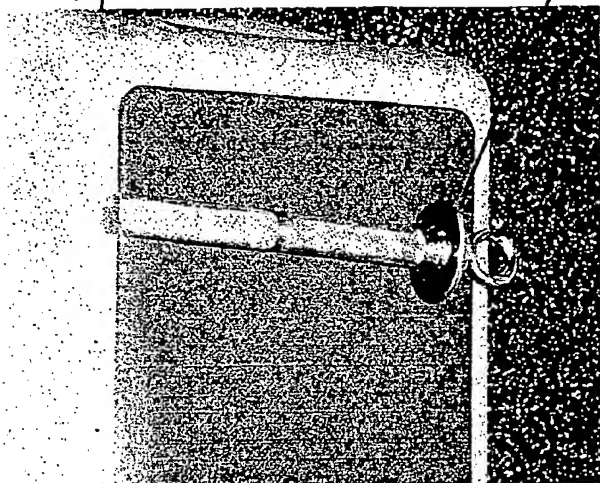
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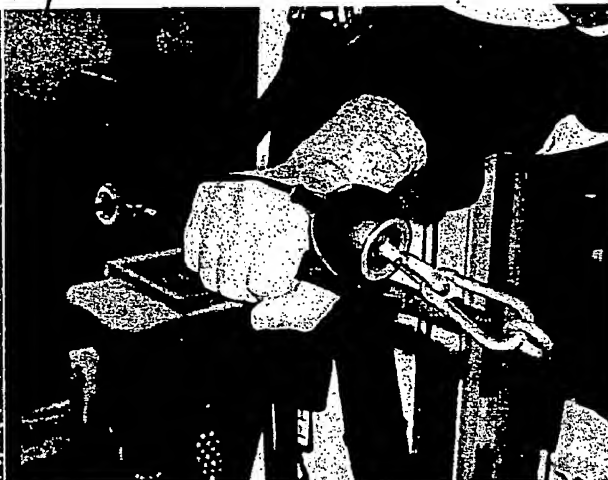
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Fig(1.)

Disc Guard  
large  
ring  
on  
rub guard



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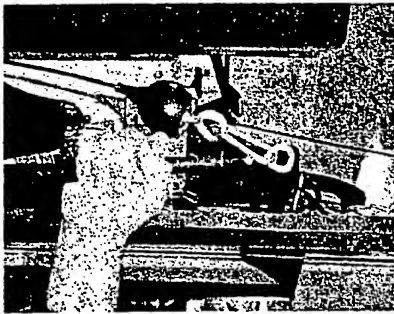
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↓  
without rub disc  
or rub guard.

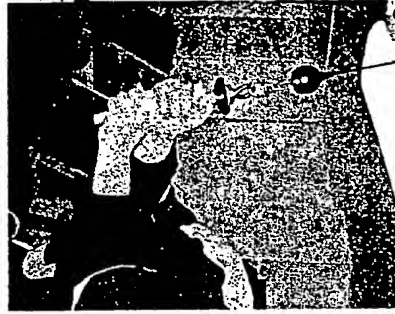


Both related, one showing  
rub guard and both hands

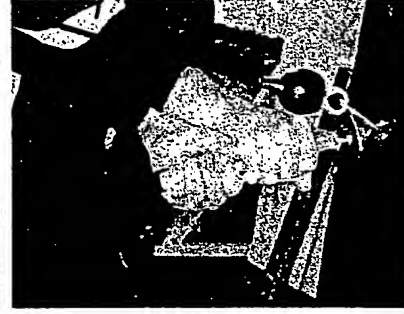
Baseball,  
Golf  
Figure (4) Tennis



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DSC00018.JPG  
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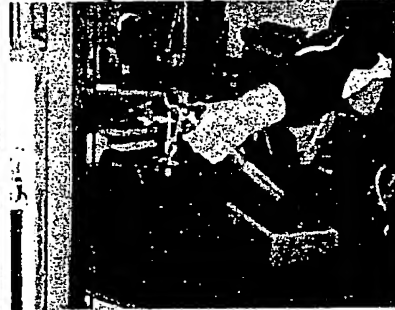
Figure (5) Cord off of hands  
When using a two  
handed grip for  
rehab or  
sports.

Low Grip + Fig 3 is high.



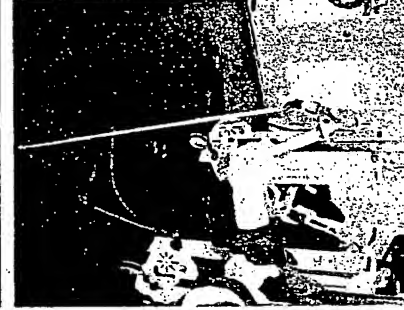
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Figure (3) Higher Grip  
more leverage



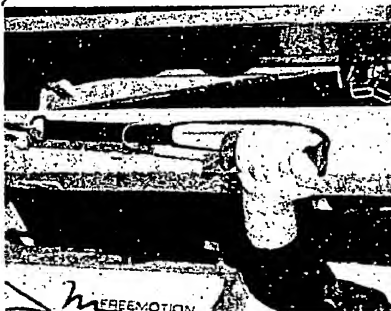
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Figure (7) rubber  
tube  
resistance

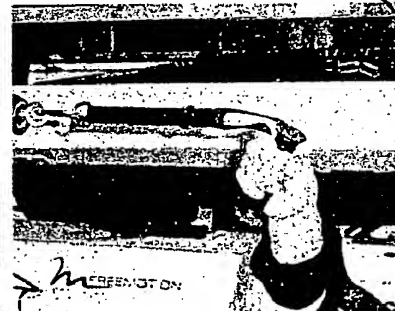


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Figure (6) Trying to do the four  
drills using a normal handle  
does very little.



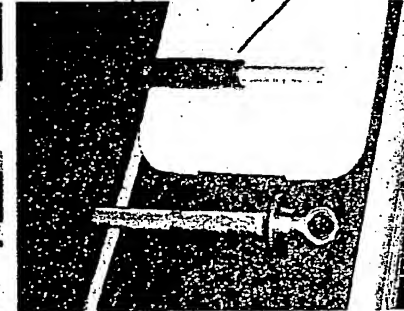
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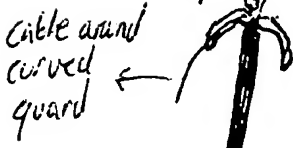
No rub guard  
either way work

Figure (2)



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Figure (5)



Two different units we  
use in our system, I  
had them hand made.

# BUTCH HARMON Golf Fitness™

by *Butch Harmon*  
FREEMOTION FITNESS™

## Shoulder Stability / Warm-up

The first three training sessions must be taught by a certified golf fitness instructor

### 1. INTERNAL ROTATION



Start

Arm against side at all times



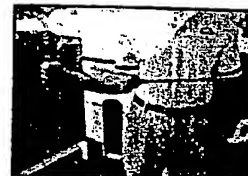
Finish

### 2. EXTERNAL ROTATION



Start

Arm against side at all times



Finish

### 3. HORIZONTAL INTERNAL ROTATION

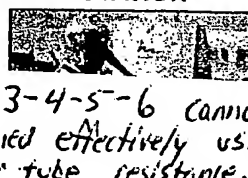
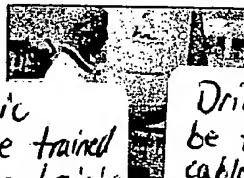


Start

90 degree angle, upper arm parallel floor during movement



### 4. HORIZONTAL EXTERNAL ROTATION



Below are the 6 basic functions that must be trained for balanced and effective training.

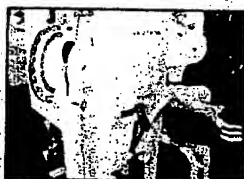
Drills 3-4-5-6 cannot be trained effectively using cable or tube resistance.

Drills 3-4-5-6 require my unit.

My invention makes it possible.

## Wrist and Forearm

### 1. WRIST FLEXION



Start

Forearm must remain parallel to floor

Finish



### 2. WRIST EXTENSION



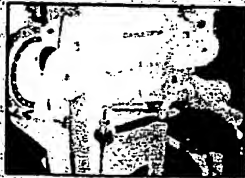
Start

Forearm must remain parallel to floor

Finish



### 3. RADIAL FLEXION



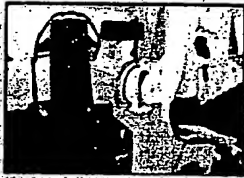
Start

Forearm must remain parallel to floor

Finish



### 4. ULNAR FLEXION



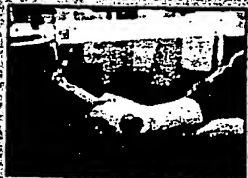
Start

Forearm must remain in same position

Finish



### 5. SUPINATION



Start

Forearm must remain parallel to floor

Finish



### 6. PRONATION



Start

Forearm must remain parallel to floor

Finish



Consult your doctor or physician before starting this program or any exercise program.

Proper warm up is recommended.